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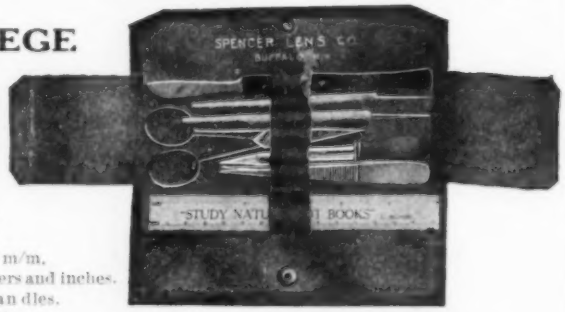

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SCHOOL AND SOCIETY

Volume XX | Saturday, July 12, 1924 | Number 498

EDUCATION AND GOVERNMENT[1]

For almost a century and a half the Fourth of July has been marked as Independence Day. It has been given over to the contemplation of those principles and those institutions which America peculiarly represents. In times gone by the exuberance of youth and the consciousness of power recently gained has often made it an occasion for boastfulness. Long orations have been made, which consisted for the most part of a reassurance to ourselves and a notice to the world that we were a great nation. Those days are past. Our own people need no reassurance, the world needs no notice, of this long self-evident conclusion.

Our country has not ceased to glory in its strength, but it has come to a realization that it must have something more than numbers and wealth, something more than a fleet and an army, to satisfy the longing of the soul. It knows now that to power must be added wisdom, and to greatness must be added morality. It is no longer so solicitous to catalogue the powers which it possesses, as to direct those great forces for the spiritual advancement of the American people at home and the discharge of our obligations to humanity abroad. America is turning from the things that are seen to the things that are unseen.

By this I do not mean that there is in contemplation, or is required, any change in our fundamental institutions. I mean, rather, that we are beginning to reap the rewards which accrue from the existence of those institutions and our devotion and loyalty to them.

Some principles are so constant and so obvious that we do not need to change them, but we need rather to observe them. The world is fairly well agreed on the probable permanence of the first four tables of the arithmetic with which I struggled when I attended the district school. It is not thought that they need to be changed, or that we can make any progress by refusing to apply them. Those who seek to evade them in the ordinary business and procedure of life would undoubtedly find that such action would work either to the ruin of any commercial enterprise, or if it did not, the beneficiaries of such a disregard of the commonly accepted rules of addition would undoubtedly find that a very large majority of people would be old-fashioned enough to charge them with fraud.

The institutions of government and society may not always be susceptible of a demonstration which is as exact as those of mathematics, but nevertheless political relationship is a very old science which has been set out in theory and wrought out in practice through very many centuries. Its fundamental principles are fairly well established. That there could have been gathered together a body of men so learned in that science, so experienced in its application, so talented and wise in its statement and demonstration, as those who proposed, formulated and secured the adoption of the American Constitution, will never cease to be the wonder and admiration of the profoundest students of government.

After making every allowance for a fortunate combination of circumstances and the accomplishments of human ingenuity, they have been nearly all forced to come to the belief that it can be accounted for only by the addition of another element, which we must recognize as the guiding hand of

[1] Address before the National Education Association at Washington, D. C., July 4, 1924.

Providence. As we can make progress in science not by the disregard, but by the application of the laws of mathematics, so in my firm conviction we can make progress politically and socially, not by a disregard of those fundamental principles which are the recognized, ratified and established American institutions, but by their scrupulous support and observance. American ideals do not require to be understood and applied.

The return of this day quite naturally invites us to a reconsideration of those principles set out in the Declaration of Independence, which were for the first time fully established in a form of government by the adoption of the American Constitution. Such a consideration presents many angles, for it touches the entire life of the nation. To deal with so large a subject adequately, it is obvious, would require extensive treatment. On this occasion it is possible only to touch on one phase of it.

It can not be too often pointed out that the fundamental conception of American institutions is regard for the individual. The rights which are so clearly asserted in the Declaration of Independence are the rights of the individual. The wrongs of which that instrument complains, and which it asserts it is the purpose of its signers to redress are the wrongs of the individual. Through it all runs the recognition of the dignity and worth of the individual, because of his possession of those qualities which are revealed to us by religion. It is this conception alone which warrants the assertion of the universal right to freedom. America has been the working out of the modern effort to provide a system of government and society which would give to the individual that freedom which his nature requires.

It is easy to appreciate both the soundness and grandeur of such a vision. Its magnitude implies that it was a conception not to be accomplished in a day or a year, but by the slow and toilsome experience of generations. The foundations of the structure have been laid, the rules of action have been stated. It is for us to make such contribution as we are able toward completion and adoption. The end sought has been to create a nation wherein the individual might rise to the full stature of manhood and womanhood.

It needed but little contemplation to determine that the greatest obstacle to freedom was ignorance. If there was to be self-government, if there was to be popular sovereignty, if there was to be an almost unlimited privilege to vote and hold office, if the people were going to maintain themselves and administer their own political and social affairs, it was necessary as a purely practical matter that they should have a sufficiently trained and enlightened intelligence to accomplish that end. Popular government could only be predicated on popular education. In addition to this, the very conception of the value and responsibility of the individual, which made him worthy to be entrusted with this high estate, required that he should be furnished the opportunity to develop the spiritual nature with which he was endowed through adequate education.

Merely to state the American ideal is to perceive not only how far we still are from its realization, but to comprehend with what patience we must view many seeming failures, while we contemplate with great satisfaction much assured success.

We can see the early beginnings of our country and understand the situation in those days better than it was understood by its own contemporaries. It was at a time of great toil and hardship. The entire settled land could be described as little more than a frontier. Everything in the way of modern convenience was wanting, and save where a seagoing commerce was beginning there was an entire absence of wealth.

The America which we know had yet to

be made. But the land was blessed with a great people and with great leaders; Washington and Jefferson, Franklin and Mason, Hamilton and Madison, Adams and Marshall, suggest a type of citizenship and leadership, of scholarship and statesmanship, of wisdom and character, of ability and patriotism unsurpassed by any group of men ever brought together to direct the political destinies of a nation. They did what they could in their time for the advancement of the public welfare, and they were not discontented because they could not immediately secure perfection. They had a vision and worked toward it. They knew that in their day it was not to be fully realized. They did not lack the courage to have faith in the future.

They started the country on that long road of stupendous achievement with which you are all so familiar. To provide for that human welfare which was the cherished hope of the Declaration of Independence, and the well wrought out plan of the Federal Constitution, it was necessary to develop the material resources of our country. There had to be created the instruments with which to minister to the well-being of the people. National poverty had to be replaced with national possessions. Transportation had to be provided by land and water. Manufacturing plants had to be erected. Great agricultural resources had to be brought under cultivation. The news service of the press had to be established. The schoolhouse, the university, the place of religious worship, all had to be built. All of these mighty agencies had to be created, that they might contribute to a unified national life where freedom might reign, and where the citizen might be his own sovereign.

It was only as this work was accomplished, as these instruments were provided, these properties built and these possessions accumulated, that there could be a reduction in the hours of labor, an increase in the rewards of employment, and a general betterment in those material conditions which result in a higher standard of living. The leisure for culture had to be secured in this way. Servitude of all kinds scarcely ever is abolished, unless there is created economic opportunity for freedom. We are begining to see that the economic development of our country was not only necessary for advancing the welfare of the people, but that we must maintain an expanding power of production if that welfare is to be increased. Business makes a most valuable contribution to human progress.

As we look back upon all this development, while we know that it was absolutely dependent upon a reign of law, nevertheless some of us can not help thinking how little of it has been dependent upon acts of legislation. Given their institutions, the people themselves have in the past, as they must in the future, to a very large degree worked out their own salvation without the interposition of the government. It is always possible to regulate and supervise by legislation what has already been created, but while legislation can stimulate and encourage, the real creative ability which builds up and develops the country, and in general makes human existence more tolerable and life more complete, has to be supplied by the genius of the people themselves. The government can supply no substitute for enterprise.

As a result of the activity of all these forces our country has developed enormous resources. It has likewise to be admitted that its requirements are very large, but the fact remains that it has come into a position where it has the accumulations of wealth and the means of production more adequately to provide for the welfare of its people, and more securely to establish their physical, mental and moral well-being. You are making your contribution to this great work in the field of education.

It is here especially that the growth and progress of our country can be most easily understood. We can realize what an opportunity for securing the higher things of life they have provided when we recall that it is claimed that one of every four persons in this nation, either as pupil, teacher or administrator, is now in some capacity directly concerned in education.

In the year 1921–22, the latest time for which complete statistics have been compiled, the students in the elementary and secondary schools and in the colleges and universities had reached the unprecedented number of 26,206,756, and the total number of teachers and administrators approximately 882,500. If to this number one should add the parents, the members of school boards, and the taxpayers who maintain them, it becomes clear at once how universal is the direct or indirect concern of our citizens with the schools.

Another indication, both of our increasing resources and of the tremendous importance of education in the life of the nation, is the great amount of money which we are able to spend for it. Twelve years ago the total money expended for all educational purposes amounted approximately to $705,781,900. In ten years this had increased to $2,144,651,000. Even when one takes into account the depreciation of the dollar, due to the economic changes caused by the World War, it becomes clear that the American people have demonstrated their faith in education and their determination to use the wealth of the nation for the creation of the highest type of manhood and womanhood.

While I believe that educators are under obligation to expend public funds economically, it seems obvious that the recent increase in expenses for this purpose is a most wise investment. It is impossible to conceive that there should be any increase in agricultural products, in the production of manufactures, or any other increase in our material wealth through ignorance. The reaction to using the resources of the country to develop the brains of the country through education has always been greatly to stimulate and increase the power of the people to produce.

As already indicated, America is turning from the mere thought of the material advantage to a greater appreciation of the cultural advantage of learning. It is coming to be valued more and more for its own sake. People desire not only the intelligence to comprehend economic and social problems, but they are finding increased leisure is little more than time wasted in indulgence unless an opportunity for real self-development and self-expression has been provided in youth by the cutivation of a taste for literature, history and the fine arts.

It is necessary also that education should be the handmaid of citizenship. Our institutions are constantly and very properly the subject of critical inquiry. Unless their nature is comprehended, unless their origin is understood, unless their value be properly assessed, the citizen falls ready prey to those selfish agitators who would exploit his prejudices to promote their own advantage.

On this day, of all days, it ought to be made clear that America has had its revolution and placed the power of government squarely, securely and entirely in the hands of the people. For all changes which they may desire, for all grievances which they may suffer, the ballot box furnishes a complete method and remedy. Into their hands has been committed complete jurisdiction and control over all the functions of government.

For the most part our institutions are attacked in the name of social and economic reform. Unless there be some teaching of sound economics in the schools, the voter and taxpayer is in danger of accepting vague theories which lead only to social discontent and public disaster. The body politic has little chance of choosing patri-

otic officials who can administer its financial affairs with safety, unless there is a general diffusion of knowledge and information on elementary economics and gifts sufficient to create and adequately to guide public opinion. Every one ought to realize that the sole source of national wealth is thrift and industry, and that the sole supply of the public treasury is the toil of the people. Of course, patriotism is always to be taught. National defense is a necessity and a virtue, but peace with honor is the normal, natural condition of mankind, and must be made the chief end to be sought in human relationship.

Another element must be secured in the training of citizenship, or all else will be in vain. All our learning and science, our culture and our arts will be of little avail unless they are supported by high character, unless there be honor, truth and justice; unless our material resources are supported by moral and spiritual resources, there is no foundation for progress. A trained intelligence can do much, but there is no substitute for morality, character and religious convictions. Unless these abide, American citizenship will be found unequal to its task.

It is with some diffidence that I speak of the required facilities of the school in this presence. We are able to give more attention to the schoolhouse than formerly. It ought to be not only convenient, commodious and sanitary, but it ought to be a work of art which would appeal to the love of the beautiful. The schoolhouse itself ought to impress the scholar with an ideal, it ought to serve as an inspiration.

But the main factor of every school is the teacher. This is one of the noblest of professions. It requires an adequate preparation and training, patience, devotion and a deep sense of responsibility. Those who mold the human mind have wrought not for time but for eternity. The obligation which we all owe to those devoted men and women who have given of their lives to the education of the youth of our country, that they might have freedom through a knowledge of the truth, is one which can never be discharged. They are entitled not only to adequate rewards for their service but to the veneration and honor of a grateful people.

It is not alone the youth of the land which needs and seeks education, but we have a large adult population requiring assistance in this direction. Our last census showed nearly 14,000,000 foreign-born white persons residing among us, made up largely of those beyond school age, many of whom nevertheless need the opportunity to learn to read and write the English language, that they may come into more direct contact with the ideals and standards of our political and social life. There are likewise over 3,000,000 native illiterates.

When it is remembered that ignorance is the most fruitful source of poverty, vice and crime, it is easy to realize the necessity for removing what is a menace not only to our social well-being but to the very existence of the Republic. A failure to meet this obligation registers a serious and inexcusable defect in our government. Such a condition not only works to a national disadvantage but directly contradicts all our assertions regarding human rights. One of the chief rights of an American citizen is a right to education. The opportunity to secure it must not only be provided, but if necessary it must be made compulsory.

It is in this connection that we are coming to give more attention to the rural and small village schools, which serve 47 per cent. of the children of the nation. It is significant that less than 70 per cent. of these children average to be in attendance on any school day, and that there is a tendency to leave them in charge of undertrained and underpaid teachers. The advent of good roads should do much to improve these conditions. The old one-room

country school, such as I attended, ought to give way to the consolidated school, with a modern building, and an adequate teaching force, commensurate with the best advantages that are provided for our urban population. While life in the open country has many advantages that are denied to those reared on the pavements and among crowded buildings, it ought no longer to be handicapped by poor school facilities. The resources exist with which they can be provided, if they are adequately marshaled and employed.

The encouragement and support of education is peculiarly the function of the several states. While the political units of the district, township and county should not fail to make whatever contribution they are able, nevertheless since the wealth and resources of different communities vary, while the needs of youth for education in the rich city and in the poor country are exactly the same, and the obligations of society toward them are exactly the same, it is proper that the state treasury should be called on to supply the needed deficiency. The state must contribute, set the standard and provide supervision, if society is to discharge its full duty not only to the youth of the country but even to itself.

The cause of education has long had the thoughtful solicitude of the national government. While it is realized that it is a state affair rather than a national affair, nevertheless it has provided by law a bureau of education. It has not been thought wise to undertake to collect money from the various states into the national treasury and to distribute it again among the various states for the direct support of education. It has seemed a better policy to leave their own taxable resources to the states and permit them to make their own assessments for the support of their own schools in their own way. But for a long time the cause of education has been regarded as so important and so preeminently an American cause that the national government has sought to encourage it, scientifically to investigate its needs and furnish information and advice for its constant advancement.

Pending before the Congress is the report of a committee, which proposes to establish a Department of Education and Relief to be presided over by a cabinet officer. Bearing in mind that this does not mean any interference with the local control and dignity but is rather an attempt to recognize the importance of educational effort, such proposal has my hearty endorsement and support.

It is thus that our educational system has been and is ministering to our national life. Our country is in process of development. Its physical elements are incomplete. Its institutions have been declared, but they are very far from being adopted and applied. We have not yet arrived at perfection. A scientific investigation of child life has been begun, but yet remains to be finished. There is a vast amount of ignorance and misunderstanding, of envy hatred and jealousy, with their attendant train of vice and crime. We are not yet free, but we are struggling to become free economically, socially, politically and spiritually. We have limited our amount of immigration, in order that the people who live here, whether of native or foreign origin, might continue to enjoy the economic advantages of our country, that there might not be any lowering of the standards of our existence, that America might remain American.

We have submitted an amendment to the national constitution designed to protect the child life of the nation from the unwarranted imposition of toil, that it might have greater opportunity for enlightenment. All these movements are in the direction of increased national freedom and an advance toward the realization of the vision of Washington and Lincoln.

A new importance is attaching to the

cause of education. A new realization of its urgent necessity is taking hold of the nation. A new comprehension that the problem is only beginning to be solved is upon the people. A new determination to meet the requirements of the situation is everywhere apparent. The economic and moral waste of ignorance will little longer be tolerated. This awakening is one of the most significant developments of the times. It indicates that our national spirit is reasserting itself. It is a most reassuring evidence that the country is recovering from the natural exhaustion of the war, and that it is rising to a new life and starting on a new course. It is intent, as never before, upon listening to the word of the teacher, whether it comes from the platform, the schoolhouse or the pulpit. The power of evil is being broken. The power of the truth is reasserting itself. The Declaration of Independence is continuing to justify itself.

CALVIN COOLIDGE

TEACHER TRAINING IN THE SECONDARY SCHOOLS OF THE UNITED STATES

THE purpose of teacher training in the high schools is to give some professional preparation to those graduates who expect immediately to enter the teaching profession. In most of the states, students are required to express their purpose to teach in the schools of the state after graduation, before being admitted to a teacher-training class. In Minnesota, applicants pledge to teach in the rural schools of that state the year following completion of the curriculum. The chief purpose of teacher training in the high school, then, is to prepare for the rural schools a more intelligent group of teachers who have had some professional training as well as a high school education.

In some states this type of teacher training covers a year's work concentrated in the senior or a graduate year of the high school course; in other states, the work is divided between the junior and senior years. In most states, each graduate is required to complete 16 units of high school work and to pass successfully the required examination, usually a state examination, before being granted a certificate to teach. In the four states in which the teacher-training work is offered as a year of graduate study, 16 units of high school work are required for admission to the class. President Coffman,[1] of the University of Minnesota, in 1917-18, found that the 11 subjects in order of their time allotment in the teacher-training curricula for the states which were offering the work at that time were: American history, agriculture, psychology, domestic science, grammar, arithmetic, civics, school management, reading, geography and physiology. The professional work consists for the most part in educational or child psychology, rural school methods and management, reviews of the common school branches, with emphasis on methods of teaching them and finally observation and practice teaching. In Oregon, for instance, "one year of observation and teaching practice is required. Each pupil must have 15 weeks of teaching practice of 40 minutes each day." The regular teacher is expected to be in the room that she may serve as critic teacher. In Minnesota the requirement is 40 to 60 minutes daily for a year, while in Montana the student is required to spend the last nine weeks of the school term teaching full time in the rural schools.

Studies of the preparation or lack of preparation of rural school teachers have revealed conditions so deplorable that any effort for improvement has seemed justifiable. A few instances will suffice to show the necessity for better trained rural teachers.

[1] Lotus D. Coffman, "Teacher training departments in Minnesota high schools."

"Dr. Thomas Jesse Jones, director of the Phelps-Stokes Fund, says that fully half of the 30,000 negro teachers of the nation have had no education beyond the sixth grade of the elementary school and that the average yearly salary for all negro teachers in the rural school service is $129.

"Sixty-three per cent. of all the teachers of Alabama have had no professional preparation of any kind, while in Virginia 10 per cent. of the colored rural teachers and 9.6 per cent. of the white rural teachers have never had a day of study beyond the elementary grades. Texas confesses to the toleration of 6,000 teachers in her rural schools who have completed only the seventh grade of the elementary course, while 22 per cent. of the rural teachers of Arkansas have common-school education only."[2]

Dr. L. A. King[3] found that 39 per cent. of the 1,450 rural teachers" studied in Pennsylvania "had had no secondary education, while of the 61 per cent. who had attended high school only 22 per cent. had completed the four-year course." That is, less than 13½ per cent. of the rural teachers had graduated from high school.

The following statement summarizes the situation as to the preparation of rural teachers in the United States:

Of the 300,000 rural teachers of the U. S. fewer than 3 per cent. are normal school graduates, fully one third or more have had no professional preparation whatever, 50 per cent., or 150,000, have not completed high school, and 10 per cent., or 30,000, have finished only the elementary grades of the common school course. Moreover, one fourth of all rural teachers, or about 90,000, leave the ranks annually to have their places filled by wholly inexperienced beginners, while at least two thirds remain not more than one year in the same school.[4]

[2] Bureau of Education, Rural School Leaflet No. 14, p. 4, May, 1923.

[3] Bureau of Education, Bul. 1921, No. 34.

[4] U. S. Bureau of Education, Rural School Leaflet No. 14, p. 2, May, 1923.

No one would be so foolish as to say or even think that graduates from normal training courses in the high school are as well prepared for teaching in rural schools as graduates of rural departments of good normal schools or teachers colleges; they do often have the advantage, however, of being trained in the environment in which they are to teach.

Thus far, however, "normal schools seem to have all and more than they can do to supply the demand for grade teachers. With a total enrollment of 163,000 students and a graduating list of only 20,000, there has been but small opportunity for meeting the needs of the 90,000 low salaried rural schools which must have new teachers every year." It is well to recall the fact also, that "about 35 per cent. of the nation's children are in the rural schools, but that only 1.7 per cent. of all normal school graduates are serving in the rural field."[5] Three years ago, the six state normal schools of North Dakota furnished but 1 per cent. of the 2,000 new teachers needed to supply the demand in the one-teacher schools of that state. If this same ratio were maintained, 600 normal schools instead of six would be required to meet the demand. It is obvious, of course, that as the number of trained teachers increase, a greater number of these teachers will necessarily go into the rural schools; but today well-trained teachers do not have to teach in the rural schools for a mere pittance, and they do not do so. The service rendered the rural schools by the normal schools and teachers colleges, then, is rendered, largely, by the poorer students—those who have failed to graduate or graduates who have been unable to secure the type of grade school position desired. Another service is rendered by giving professional training during summer sessions to rural teachers, many of whom are not high school graduates. In one of the best teachers colleges of the country, from 600 to 800

[5] Op. cit.

of the 2,000 students in attendance at its summer sessions are not high school graduates.

With an annual demand of 90,000 rural teachers and a rural output from the normal schools of less than 2 per cent. of the demand, it is evident that some other agency must be employed for the preparation of rural teachers. To meet the situation 24 states—just half of the states of the Union—have provided some plan of teacher training in secondary schools. The following states have made provision for such training: Arkansas, Florida, Georgia, Iowa, Kansas, Maine, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Vermont, West Virginia, Wisconsin and Wyoming. In eight other states—Alabama, Colorado, Illinois, Kentucky, Louisiana, South Carolina, Texas and Virginia—some teacher training is done in certain high schools, but these states can not be said to have state plans. Virginia, however, grants state certificates to some of its high school graduates. In the 24 states having state plans, state aid of from $250, in Maine, to total expenses—aside from fuel and janitor service—in Minnesota, is granted. Missouri appropriates $1,500 and Michigan $1,600 for each high school qualifying for teacher training.

Provision for this work was first made in 1827 when "the New York legislature appropriated money to aid the academies 'to promote the education of teachers'—the first state aid in the United States for teacher training."[6] Eight academies were approved for the work in 1834 and eight others in 1838. The number developed to 113 in 1915 and decreased to 54 in 1922. In Minnesota the work was provided for in 1903; in Nebraska in 1907; Kansas, 1909; Vermont, 1910; Arkansas, Iowa, North Dakota and Oregon, 1911; Maine, Missouri and Wisconsin, 1913; and Ohio in 1914. Other states followed year after year until 1920, when Wyoming was the last state to provide for the work. Since 1920, however, changes have been made in requirements, amount of support, etc., in several states.

It is impossible to determine the number of schools in the United States which offer teacher training as a part of the curriculum. Only six schools in Florida were reported by the state superintendent, as offering teacher training, yet Dr. Roemer,[7] in 1921, found that 32 high schools in that state offered some professional work.

Operating under state plans, there were in 1922-23 approximately 1,725 training classes, exclusive of the 180 county training schools for colored pupils in the south, with an enrollment of 31,500 students and an output of about 19,000 graduates. In Kansas alone, since legislative enactment in 1909, 18,500 certificates have been issued and 8,176 are said by the state superintendent to be in force at present.

In the four states of Michigan, Ohio, Tennessee and Wisconsin, the work is conducted in *county* normal training schools or classes. In the four states of Minnesota, New York, Ohio and Vermont, the satisfactory completion of a four-year high school course or its equivalent is prerequisite to admission to these teacher-training classes.

There is an indication, then, that in some states, teacher training as a part of the regular four-year high school has served its purpose and that this work is being extended to a type of junior college work. In Vermont, full credit is given by the State Normal School for the first year of teacher training done as a graduate year in the secondary schools. In a few states the work is being dropped. Due largely no

[6] E. P. Cubberley, "The History of Education," p. 751.

[7] "A study of Florida high schools," *University (of Florida) Record*, November, 1921.

doubt to the recommendation of the survey staff, Virginia discontinued teacher training in the high schools as a state plan, although a few certificates are still granted for teacher training done in certain private schools. Nevada has discontinued the work. The communication from Oklahoma says, "We are trying to eliminate these courses as rapidly as possible, as we now have an over-supply of teachers." In Oregon "the course is at best a makeshift to be relied upon only until such time as Oregon may provide adequate normal school facilities to train teachers for the elementary schools."

In other states, the work is either being inaugurated or attempted. In fact, in some states if is being almost demanded. The communication from Illinois states that "we still hope that something may be done before long in this direction." A Colorado law of 1923 provides that unless a high school graduate has had two units of normal training in the high school or its equivalent, she is not qualified to take the county teachers examination. Dr. Roemer, in his survey of the First Class County high schools of Tennessee, found that "teaching is the largest occupation anticipated or engaged in (outside of the home) by any single group of girls; and that it is one of the largest anticipated by the senior and graduate boys. After this study was started, public sentiment forced a law to be enacted making teacher training a part of the educational program of Tennessee."[9]

In 18 states a *state* certificate is granted to students who complete the work satisfactorily and pass successfully the examination ordinarily required. These certificates may be renewed in almost every state and may result in permanent certificates in five. Although in most cases some attendance on higher institutions of learning is required in order that a permanent certificate may be secured, such provision seems unwise.

There are decided differences of opinion as to the advantages and disadvantages of teacher training in the high schools.

Although "as a whole the teaching force of the schools in Virginia is woefully lacking in the education and training essential for good teaching," Dr. Inglis, in the "Virginia Survey," says: "Her (Virginia's) experience also has been that found in other states—that the results were not satisfactory. . . . The practice of maintaining such courses in high schools is thoroughly unsound and should be totally abandoned."[10]

On the other hand, although the committee which made the survey of North Carolina for the General Education Board recognized that "high school training departments . . . are temporary expedients," it believes that "they should be used extensively for the time being. They are generally recognized as one of the most effective and cheapest means of reaching large numbers of prospective rural teachers."[11]

In his survey of these institutions in Minnesota, President Lotus D. Coffman says:

> They are liked there (in the communities which they serve) because they serve the local needs—because they permit girls to receive training who could otherwise have none, because "they cater to the local situation," because they supply the teachers who stay in the country for a little while (two or three years at the most, with rare exceptions), but who, if trained in the normal schools, would not serve the rural schools for a day. The departments are now institutions with vested interests, and any effort to supplant them will meet with vigorous opposition. As they have given and are giving great and good service to the state, of course no one could wish to supplant them, except by other training institutions which are clearly better.[12]

[9] Joseph H. Roemer, "The function of secondary education," George Peabody College for Teachers Contributions to Education, No. 1, p. 156.

[10] "Virginia Survey," pp. 139, 157.

[11] General Education Board, "Survey of North Carolina," p. 124.

[12] Lotus D. Coffman, "Teacher training department in Minnesota High Schools," p. 75.

In Missouri, "the state department of education thoroughly recognizes the valuable contribution teacher-training schools have made to Missouri education."[13] In Nebraska, "the success of this work has fully justified the expenditure of money and effort entailed. It has been an incentive to young people to take up teaching and has meant much in the way of furnishing schools with better trained teachers."[14]

In response to the question, "In your opinion what has been the influence of teacher training in the secondary schools on the professional training of teachers in the state as a whole?" 18 state superintendents think it has improved the situation; one thinks it has had no influence and one believes it has tended to retard progress. Fourteen of the officers making reply to the inquiry as to what has been the influence of the normal training curriculum on the attendance in higher institutions for teacher training in the state, believe it has tended to increase attendance; two think it has had no appreciable influence; while three are of the opinion that it has been a cause of decrease.

Some of the arguments advanced against teacher training in the high schools are:

It lowers the standard of teaching.

The graduates are immature and ineffective.

It interferes with the regular work of the school.

Teachers of normal training classes are meagerly trained.

Many low standard high schools have been approved for the work.

The money being appropriated for normal training in the states might better be expended in the maintenance of an additional normal school or teachers college.

In response to the criticism that teacher training in the high school "lowers the standard of teaching," Miss Mabel Carney of Teachers College, Columbia, says:

As a matter of fact the very opposite is true. Those who make this statement should remember that choice does not lie under present conditions, between high school training and full rank normal school preparation, but rather between what the high school can do and nothing.[15]

In Kansas, "even before there was any attempt at special preparation for this work, substantially 40 per cent. of all our high school graduates went immediately to teaching."[16]

No doubt some graduates of these teacher-training classes *are* inefficient. In most cases two or three years of high school work is required for admission to the classes, depending on whether the work is scattered over two years or concentrated into one. In some states, however, persons "of good moral character" who hold "a second-grade certificate," or who have had "one year of successful experience in teaching in the public schools" meet the entrance requirements. In Missouri, "no student whose standing ranks him among the lower third of the class to which he belongs is permitted to elect professional work except by permission of the state superintendent." In a study of over 2,000 prospective teachers enrolled in the county normals of Ohio, Bliss found that "they ran the gamut from inferior to gifted." Dr. Coffman found that the students taking the teacher-training work in Minnesota were practically all girls, that "these girls are of about average ability."

In some states the normal training work does not seriously interfere with the regular work of the schools. In North Dakota, only one and one half units of professional work is required for the certificate. In Nebraska, "college entrance credit is granted by the university for all courses, provided they are taught as prescribed in the normal training courses." An excellent course in "A Survey of World His-

[13] "Teacher Training High Schools of Missouri," 1923, p. 3.

[14] Normal Training Regulations for Nebraska, 1921-22.

[15] Bureau of Education, Rural School Leaflet No. 14, May, 1923.

[16] Course of Study for High Schools of Kansas, Part VII.

tory'' is required of these Nebraska normal training graduates.

In spite of the fact that the training teachers must be approved by the state superintendent in many states, a number of these teachers lack efficient training, just as do a considerable number of other high school teachers in the United States. Most of the states now require special preparation as well as the approval of the state superintendent. Maine and certain other states require that teachers of normal training work shall be graduates of the state normal school or have equivalent preparation; Missouri requires ''100 hours of college credit, 30 hours in education. On and after September 1, 1925, 120 hours college credit, 35 hours in education, will be required.'' In Minnesota, ''The commissioner of education will endorse only such teachers as possess special fitness and personality for this work;'' who have had ''five years of elementary teaching experience, including two years in one room rural schools;'' who have ''an advanced diploma from a Minnesota State Teachers College or an endorsed diploma from another state;'' who ''show a proper spirit of professional growth and cooperation.'' ''Every training teacher shall attend a summer term at an acceptable educational institution at least once in every four years and shall complete a full summer's work in advanced credit courses.'' In several states, special requirements as to preparation and experience are made of the superintendent of the school, of the high school teachers, and even of the grade teachers in the schools in which the high school is approved for teacher training.

Dr. Coffman found in his study of the teachers of teacher training in the high schools of Minnesota that 83 per cent. of them were normal school graduates; 50 per cent. were born and reared in the country; their median age was 34 years, ten years older than the typical American teacher; ''from two thirds to three fourths of them are voluntarily in summer school every year;'' they have had experience in both rural and town schools; a few read as many as forty books a year; and finally ''they are a selected group.''

In Nebraska, in 1922-23, just 42½ per cent. of the normal training teachers had the A.B. or A.M. degree, while almost 60 per cent. of the other high school teachers of the state had this same academic accomplishment. Thirty-six per cent. of the normal training teachers had had ten years or more experience and 76 per cent. had had five or more years; while there were but 10 per cent. and 32 per cent. of the other high school teachers of the state with corresponding length of service. The median salary of the normal training teachers was over $30 more than that of the other high school teachers. If Nebraska is typical, then it appears that the teacher training teachers are ''long'' on experience and ''short'' on academic training as compared with other high school teachers.

In New York 24 per cent. of the teachers of training classes are not graduates of standard high schools, yet almost 90 per cent. are graduates of normal schools. The difficulty is that less than one fifth of them have graduated since 1897. The median of experience for the group is 20.5 years and half of them have passed the age of 45; yet less than seven per cent. of them hold A.B. degrees.

It is quite possible that a prospective teacher may be a poorer rather than a better teacher because of inferior training. It is probable that many of the high schools which have been approved for the work are unable to provide efficient teachers and satisfactory training facilities. Some educators doubt whether there are 300 communities in Kansas in which favorable facilities for normal training work can be provided. That teacher training in the secondary schools tends toward ''inbreed-

ing'' and lower salaries in some communities can scarcely be questioned.

Furthermore, in Kansas, another teachers' college, equal in rank to the three now in operation, could be maintained with the money now being expended by the state on teacher training in the high schools. The same is probably true of Missouri and a few other states. Whether the investment in another teachers college would yield greater returns in a trained teaching force than would the maintenance of normal training in the high schools is a debatable question.

CONCLUSION

At least 32 states have some form of teacher training in the secondary schools; 24 have state plans. The success of the movement seems evident from the fact that 90 per cent. of the state superintendents under whose supervision state plans are in operation believe that the work has improved the professional attitude of the teachers of the state as a whole and 74 per cent. believe the work has tended to increase attendance at state normal schools and teachers colleges; and in the further fact that state appropriations for the work are being increased from year to year.

It would seem that some states, such as California and Massachusetts, have outgrown the demand for teacher training in the secondary schools as a means for supplying the immediate demand for rural teachers; other states, such as Mississippi and Tennessee, should probably extend their state plans; while some states, Texas and even Illinois, could likely improve their teaching forces by inaugurating the plan.

Each state should reserve the right to approve or disapprove schools for the work and to decide when the schools have served their purpose in supplying the demand for trained rural teachers. It is to be hoped that teacher training in the four-year high school as a means of supplying this demand is a "temporary expedient," and agencies for training will likewise be elevated.

But even when the immediate demand for trained teachers has been supplied, states and communities should consider the advisability of retaining some of these courses as an incentive to young people to take up teaching as a profession. Much of the work now demanded for a certificate should then be omitted, but the curriculum should contain a generous portion of psychology, social and world problems, and at least one course designed as a temptation to worthy students, many of whom would not do so otherwise, to consider the advantages and possibilities of teaching. There are few arguments for the introduction of a college preparatory curriculum or a commercial curriculum which can not be given for a normal training curriculum as well. If the high schools of the country totally neglect teaching as a calling and yet introduce curricula in every other vocation under the sun, it is unreasonable to expect that some day the teacher-training institutions will be overflowing with capable prospective teachers and that all the schools will soon be manned or "womaned" by efficient four-year graduates of teachers colleges.

FRANK L. WRIGHT

WASHINGTON UNIVERSITY,
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EDUCATIONAL EVENTS

THE FIRST UNIVERSITY ON THE GOLD COAST

THE British government, according to the London *Times*, has agreed to the scheme inaugurated by the Governor of the Gold Coast for the construction of a large university college on the Gold Coast, whose chief purpose will be to afford facilities for the education of Africans desiring to enter any profession without the necessity of going to any European university. The building is to cost a quarter of a million sterling and is to be erected at Achi-

mota on a site of four square miles, eight miles inland from Accra. The object of the scheme is in fact to commence in British Africa a public school system like that which has proved so successful in Ceylon. Mr. A. G. Fraser, the principal of Trinity College, Kandy, has accepted the post of principal at Accra. He has been in England selecting his staff at Oxford and other universities and leaves for the Gold Coast in September. At present there are only primary schools on the Gold Coast, and the most immediate aim of the new college will be to train staffs for proposed secondary schools. The main idea underlying the whole scheme is to provide character training for African leaders in thought, industries and the professions to assist in the development and administration of the country. It is intended to provide special courses at the college for Africans entering the engineering, medical and legal professions. In view of the vital importance of health quarters in West Africa, it is proposed to coordinate the medical courses at the new college with the training at the proposed medical school near the great African hospital at Accra, the largest of its kind in Africa, which was built at a cost of a quarter of a million sterling and opened only a few months ago.

THE SIXTH INTERNATIONAL CONGRESS OF TEACHERS OF HIGH SCHOOLS

ON August 27, 28, 29 and 30, 1924, the Sixth International Congress of Teachers of High Schools will meet in Warsaw, Poland. Former congresses were held successively in Ghent, Strassburg, Paris, Luxemburg and Prague. Delegates from about twenty countries participate in these congresses, teachers as well as representatives of ministries and boards of education.

The tentative program of the congress is as follows:

Relation of high school to college.
Relation of high school to primary school.
Improvement of high school education.
Report of the representative to the League of Nations.
International relations of teachers and students in high schools.

During the conference of the congress a school exhibit will be arranged.

Subjects for discussion will be the educational problems and the report on the activity of the administrative body of the International Bureau of Education. Each year the congress is organized by educational societies of a different nation. The high patronage over the congress in Luxemburg was accepted by the Grand Duchess and her husband; in Prague, by President Masaryk. The Polish Society of Teachers of High Schools and Colleges is organizing the congress in Warsaw this year, and the president of the Republic of Poland has accepted the patronage over it. At the request of the president the festive opening of the congress will probably take place in the old Royal Palace, in the hall in which the Polish Commission for national education—the first ministry of education in Europe—conferred 150 years ago.

INTERNATIONAL STUDY

MARCUS M. MARKS, former borough president of Manhattan, who is in Europe as a delegate of the American Council of Education to make a survey of the possibilities of arranging an international exchange of credits to permit students of all nationalities to spend one college year abroad, spoke recently before the Renaissance Club in Paris explaining a plan to the principal educators of France, among whom were M. Coville, director of higher education; M. Thamin, director of secondary education; Petit Duraillis, director of intercollegiate relations; M. Luchaire, French delegate on the intellectual relations committee of the League of Nations; Professor Ceste, M. Firmin Roz and the deans of the faculties of medicine, law, sociology and sciences of the University of Paris. As quoted in the New York *Times*, Mr. Marks said:

For an American student to come abroad to study at the present moment there are serious difficulties. If he comes during the college year he loses that year in college and must regain an additional year to attain his degree. When he finishes college he is ready to start work. To study abroad is considered an exceptional privilege for the wealthy or students specializing in certain courses.

If there were an international reciprocal arrangement whereby students could receive credits in foreign universities which would be accepted in lieu of a corresponding period of work at home the way would be blazed for international study and travel by students. Foreign study would no longer pre-

sent to parents the difficulties it raises at the moment. There would be no problem if the student at no additional cost could go abroad under an organized scheme and spend one year in recognized, accredited study. . . . Already a group of American financiers, after an understanding with the British educational authorities, have subscribed $25,000 per year for five years to help American students carry on their studies in English universities.

The plan has received the endorsement of the American universities in Constantinople and of the president and premier of the Czechoslovakian Republic.

Assurance was given Mr. Marks by all present that his plan was most heartily approved and that the utmost cooperation would be given to its execution.

APPROPRIATION FOR THE AMERICAN LIBRARY ASSOCIATION

THE Carnegie Corporation of New York has appropriated to the American Library Association the sum of $108,100 for the year October 1, 1924, to September 30, 1925, according to a communication from Dr. F. P. Keppel, president of the Carnegie Corporation, to Mr. Carl H. Milam, secretary of the American Library Association.

The fund comprises a number of specific grants to be administered by the American Library Association as follows: $26,100 is appropriated for a Library Training Board; $15,000 is for the Survey being made by the Committee of Five on Library Service, of which Dr. A. H. Bostwick, of St. Louis, is chairman —C. Seymour Thompson, of the Savannah Public Library, has accepted the directorship of this survey; $12,000 is for a special study of the work and possibilities of libraries in adult education under a committee to be appointed, with Luther L. Dickerson as executive assistant; $10,000 for the publication of library textbooks; $9,000 for the preparation and publishing of reading courses; $15,000 for the revolving fund for American Library Association publications; $6,000 for the expenses of a general editor and proofreader; $15,000 for maintenance of the association's headquarters office which has recently moved from the Chicago Public Library Building to the John Crerar Library Building, Chicago.

THE BROOKLYN BOTANIC GARDEN

THE thirteenth annual report of the Brooklyn Botanic Garden, for 1923, just issued, gives an extended summary of the investigations carried on at the garden during the past year in plant pathology, genetics, ecology and systematic botany. The educational work of the garden, both locally and in a larger way, has had a rapid growth since its establishment. Last year the attendance of adults and children at classes and lectures was nearly 100,000. All the high schools of Brooklyn and many from other boroughs, and over 90 per cent. of the Brooklyn public schools made use of the educational cooperation afforded by the garden in 1923, either by sending classes for special lectures and class instruction, or in other ways. Eighteen hundred teachers were supplied with living plants or other study material, and nearly 5,000 potted plants were placed in class rooms of the city schools. Seeds for planting in school and home gardens were supplied to over 91,400 boys and girls. The garden library now has over 9,800 books and over 6,600 pamphlets, and received last year over 700 periodical publications on plant life and closely related subjects. The total attendance for the year was over 408,000 persons. The report includes an appendix dealing with the three scientific journals and other publications issued by the garden.

A STUDY OF MODERN LANGUAGE TEACHING IN AMERICA

A COMMITTEE of modern language teachers has been formed to make a thorough study of the teaching of the foreign modern languages of the United States and Canada. The investigation will be carried on under the auspices of the American Council on Education, with the cooperation of the Carnegie Corporation, according to an announcement made by Dr. C. R. Mann, director of the American Council, before the National Federation of Modern Language Teachers at Washington on July 3.

The committee hopes to determine by scientific tests which groups of students are best fitted to pursue the study of the modern languages, the best methods and materials of instruction suitable for each group, and the best

means of securing a close correlation between modern language study and other subjects in the curriculum. As a result of this investigation, it is hoped that a constructive program of recommendations may be made for improving the teaching of the foreign modern languages in secondary schools and colleges.

An attempt will be made to formulate the ultimate aims and purposes of modern language instruction by seeking information from persons whose duty it is to measure public opinion, as well as from those who by their official position or from individual experience are entitled to enlightening views regarding the national, regional, vocational, cultural and social values of modern language study.

The chairman of the investigation is Professor Robert H. Fife, of Columbia University.

Discussing the projected study at the Washington meeting, Professor C. M. Purin, of Hunter College, New York City, said:

> The proposed survey of modern language teaching in the United States and Canada, following a similar survey of the teaching of the classical languages, is a highly significant undertaking and should be eagerly welcomed by the teaching profession.
>
> According to the plans of the committee on direction and control, the survey will not only tabulate and summarize, in a business-like manner, the debits and credits of our professional endeavors, but, what is more important, will show conclusively wherein we have perhaps erred and what modifications of the prevalent practices should be effected in order to obtain larger and better returns.
>
> In order to settle definitely the various mooted questions and theories regarding the cultural and disciplinary values of modern languages in the general scheme of American education, a thoroughgoing study of all phases of language instruction is to be undertaken. Suitable experiments in high schools and colleges are to be conducted by linguistic and psychological experts. In addition, constructive suggestions from prominent educators as well as from noted laymen will be solicited and embodied in the final report. Thus the latter will represent the voice and opinion of the intellectual leaders of the country. A special section of the report is to contain an outline of the present tendencies and methods of modern language instruction in the leading countries of Europe, thus furnishing a valuable standard of comparison.

OFFICERS OF THE NATIONAL EDUCATION ASSOCIATION

JESSE H. NEWLON, superintendent of schools of Denver, Colorado, was elected president of the National Education Association at the Washington meeting on July 3. Miss Cornelia S. Adair, Richmond, Va., was elected treasurer, and the following were elected vice-presidents:

Olive M. Jones, principal, New York City, the retiring president; Albert S. Cook, state superintendent of schools, Baltimore, Maryland; Harold W. Foght, president, Northern Normal and Industrial School, Aberdeen, S. Dak.; J. M. Foote, state rural supervisor, State Department of Education, Baton Rouge, La.; Florence M. Hale, state agent for rural education, Augusta, Maine; L. O. Marberry, principal, Rockford, Ill.; Mary F. Mooney, vice-president, Washington School, San Francisco, Calif.; Helen B. Shove, principal, Minneapolis, Minn.; R. M. Sealey, state high school inspector, Tallahassee, Florida; A. A. Slade, superintendent of schools, Casper, Wyoming; Cora Steele, principal, Terre Haute, Indiana; W. O. Webb, superintendent of schools, Globe, Arizona.

State directors were elected as follows:

Alaska—L. D. Henderson, commissioner of education.

Alabama—P. W. Hodges, secretary of certification and placement, Montgomery.

Arizona—Sutton H. Martin, superintendent of schools, Prescott.

Arkansas—Annie G. Griffey, primary supervisor, Little Rock.

California—W. P. Dunlevy, teacher San Diego high school, San Diego.

Colorado—H. B. Smith, secretary of the Colorado Education Association, Denver.

Connecticut—Everett Cortwright, city superintendent of schools, Bridgeport.

Delaware—H. V. Holloway, state superintendent of public instruction, Dover.

Florida—W. S. Cawthon, state superintendent of public instruction, Tallahassee.

Georgia—Kyle T. Alfriend, dean of Bessie Tiff College, Forsyth.

Hawaii—Willard E. Givens, commissioner of education, Honolulu.

Idaho—Elizabeth Russum, state superintendent of public instruction, Boise.

Illinois—Sarah A. Thomas, high school teacher, Rockford.

Indiana—H. L. Smith, dean of the school of education, Indiana University, Bloomington.

Iowa—T. R. Roberts, superintendent of schools, Independence.

Kansas—M. E. Pearson, superintendent of schools, Kansas City.

Kentucky—R. E. Williams, secretary of the Kentucky Education Association, Louisville.

Louisiana—Loretta Doerr, principal, McDonough No. 15, Rampart.

Maine—Josiah W. Taylor, state agent for secondary education, Augusta.

Maryland—William Burdick, state supervisor of physical education, Baltimore.

Massachusetts—Mary McSkimmon, principal of Pierce School, Brookline.

Michigan—C. L. Goodrich, assistant superintendent of schools, Lansing.

Minnesota—W. H. Shephard, teacher of the North High School, Minneapolis.

Mississippi—J. W. Powers, chancellor of the State University, University.

Missouri—Thomas J. Walker, editor of *School and Community*, Columbia.

Montana—A. H. Douglass, Butte.

Nebraska—M. C. Lefler, superintendent of schools, Lincoln.

Nevada—Maude Frazier, deputy state department, fifth district, Las Vegas.

New Hampshire—Florence Hewitt, teacher in the High School, Portsmouth.

New Jersey—Charles Dyke, superintendent of schools, Short Hills.

New Mexico—Isabelle Lancaster Eckles, state superintendent of public instruction, Santa Fe.

New York—Sara L. Rhodes, School 28, Brooklyn.

North Carolina—R. H. Wright, president of the East Carolina Teachers College, Greenville.

North Dakota—M. J. McCurdy, secretary of the State Education Association, Washburn.

Ohio—R. J. Kiefer, superintendent of schools, Niles.

Oklahoma—A. C. Parsons, superintendent of schools, Oklahoma City.

Oregon—W. L. Verry, teacher of the Lincoln High School, Portland.

Pennsylvania—J. H. Kelley, executive secretary of the Pennsylvania State Teachers Association, Harrisburg.

Rhode Island—William O. Holden, head, Commercial Department, Pawtucket.

South Carolina—Geo. Harris Webber, superintendent of city schools, Beaufort.

South Dakota—Harold W. Foght, president of the Northern Normal Industrial School, Aberdeen.

Tennessee—S. L. Smith, general agent of the Julius Rosenwald Fund, Chamber of Commerce, Nashville.

Texas—Katherine Gorbutt, principal of the elementary school, El Paso.

Utah—Karl Hopkins, superintendent of schools, Ogden.

Vermont—Ernest A. Hamilton, superintendent of schools, Newport.

Virginia—S. A. McDonald, principal of Ruffner Junior High School, Norfolk.

Washington—Mrs. Jennie M. French, elementary school principal, Tacoma.

West Virginia—J. H. Hickman, assistant state superintendent of schools, Charleston.

Wisconsin—John F. Sims, president of Stevens Point State Normal School.

Wyoming—A. A. Slade, superintendent of schools, Casper.

District of Columbia—Harry English, secretary, educational examiners.

Virgin Islands—Arthur E. Lindberg, director of education, St. Thomas.

Philippine Islands—Luther B. Bowley, commissioner of education, Manila.

Porto Rico—Juan B. Huyke, commissioner of education, San Juan.

EDUCATIONAL NOTES AND NEWS

DR. WILLIAM H. S. DEMAREST retired from the presidency of Rutgers College on July 1. Dr. Walter T. Marvin, Collegiate Church professor of logic and mental philosophy and dean of the faculty, has been made acting president.

DR. LEROY A. HOWLAND, Fisk professor of mathematics, has been reappointed acting president of Wesleyan University.

DR. CHARLES K. EDMUNDS, for the last fifteen years president of Canton Christian College, China, took up his work on July 1 as provost of Johns Hopkins University.

JOHN LAWRENCE SEATON, of New York, assistant secretary of the Board of Education of the Methodist Episcopal Church, assumed the work of the presidency of Albion College on July 1.

RALPH W. SWETMAN, now at Stanford University, and formerly director of the training school of the State Normal School at Ellensburg, Wash., has been elected president of the State Teachers College at Arcata, Calif., to succeed Dr. N. B. Van Matre, who recently resigned.

E. J. KLEMME, director of the extension di-

vision of the State Normal School at Bellingham, Wash., has been elected president of the Intermountain Union College, Helena, Mont. The Intermountain Union College represents a combination of the Methodist and Presbyterian educational interests in Montana, including Montana Wesleyan College, at Helena, and Montana College, at Deer Lodge.

THE trustees of Juniata College, Huntingdon, Pa., have granted to Dr. I. Harvey Brumbaugh, for twenty-five years president of the college, leave of absence for graduate study next year. On his recommendation, Dr. M. G. Brumbaugh, ex-governor of Pennsylvania, former superintendent of schools of Philadelphia, has been elected permanent president of the college and he will enter upon his duties early in the coming college year. In the meantime the administrative work is in the care of Dr. C. C. Ellis, vice-president.

BISHOP THOMAS SHAHAN, president of the Catholic University of America, Washington, was reelected president of the National Catholic Educational Association, at the closing session of its twenty-first annual convention at Milwaukee.

DR. BRANDER MATTHEWS, professor of dramatic literature; John Bassett Moore, professor of international law and diplomacy, and Dr. Munroe Smith, professor of Roman law and comparative jurisprudence, members of the faculty of Columbia University for more than thirty years, have retired.

DR. J. GEORGE BECHT, state superintendent of public instruction for Pennsylvania, has received the honorary degree of doctor of literature from Ohio Northern University.

THE University of Southern California has conferred the honorary degree of doctor of literature upon Aurelia H. Reinhardt, president of Mills College, Oakland, California.

UEL W. LAMKIN, president of the State Teachers College, Maryville, Mo., has received the honorary degree of master of arts at the Missouri Wesleyan College commencement.

THE honorary degree of doctor of science was conferred by the University of Wisconsin on Dr. Frank Billings, dean of the faculty of Rush Medical College, Chicago. The honorary degree of master of arts was conferred upon R. L. Cooley, director of the Milwaukee Continuation School.

AN invitation has been extended to Professor Kurt Koffka, of the University of Giessen, to be acting professor of education at Cornell University for the year 1924–25 and lecturer on the Jacob H. Schiff Foundation.

FRED ENGLEHARDT, of the University of Pittsburgh, has been appointed a professor in the college of education at the University of Minnesota.

DR. J. CARLETON BELL, of the Maxwell Training School for Teachers, Brooklyn, N. Y., has been appointed assistant professor of education in the College of the City of New York. Dr. Bell was the founder and for many years the managing editor of *The Journal of Educational Psychology*.

AMONG those giving courses in education at Harvard University this summer are: Professor Harlan C. Hines, of the University of Cincinnati; Edwin A. Lee, director of the division of vocational education at the University of California; Dr. Harry B. Wilson, superintendent of schools in Berkeley, Calif., and Harvey S. Gruver, superintendent of schools in Lynn, Mass.

JAMES FREDERICK MOUNTFORD, lecturer in the classics and ancient history at the University of Edinburgh, has been elected professor of classics at Cornell University. In May, Dr. Mountford gave a series of twelve lectures on the Roman drama at Cornell.

A. PRINGLE JAMESON, Sc.D. (Aberdeen), has resigned from his position as professor of zoology in Mills College, Oakland, Calif., and has accepted a lectureship in the University of Cambridge, where he will have charge of investigations on the parasites of domestic animals. Dr. Horace Gunthorp, of the University of Washington, has been appointed as head of the department of zoology at Mills College.

THE addition of four professors to the faculty of Ohio State University has been announced. C. Wells Reeder, for eighteen years on the staff of the university library and since 1913 reference librarian, has been transferred to the college of commerce and journalism with the rank of assistant professor. He will teach in the department of business organization.

Professor George M. Stephenson, of the University of Minnesota, will be added to the department of American History during the absence of Professor Carl Wittke, who will go to the University of Iowa for a year. George L. Lynch has been made assistant professor in the department of landscape architecture, and Edmund M. Spieker, now of the United States Geological Survey, has been made assistant professor of geology.

C. A. GIBBONS, assistant superintendent of schools of Wayne County, Ohio, has been elected county superintendent to succeed the late G. N. Baumgardner.

K. A. RYGH, superintendent of schools at Cyrus, Minn., and formerly superintendent of schools of North Dakota, has been elected to the superintendency of the Roseau, Minnesota, schools for the coming year.

DR. JOHN L. CARVER, principal of the Friends Seminary, 226 East 16th street, New York City, has resigned after seven years of service to become associated with a foreign travel agency. Dr. Carver will be succeeded by Henry L. Messner, a graduate of Swarthmore College, who for five years has been principal of the Milburn, N. J., High School.

RAYMOND G. FULLER, director of the Trounstine Foundation for Social Research, Cincinnati, has accepted the executive secretaryship of the Massachusetts Child Labor Committee and will take up his work in Boston on September 1. He succeeds Mrs. Kenneth E. Appel.

GEORGE HUNTINGTON, vice-president of Roberts College, Constantinople, arrived in New York on July 3 to spend the summer in America.

PROFESSOR LUCIUS C. PORTER, head of the department of Chinese at Columbia University for the past two years, is returning shortly to China to resume his work as dean of arts and sciences at the National University of Peking.

MISS HARRIET A. SLEEPER, for the past five years a teacher of science in Bradford Academy, and formerly of the Lawrence High School, sailed for England on June 21 to be exchange teacher in science at the Girls' County School, Bishop Auckland, County Durham, England. This exchange has been brought about through the efforts of Miss Marion Coats, principal of Bradford Academy, as a result of her membership in the English Speaking Union, an organization with offices in New York city and London, whose object is to promote a better understanding between the United States and England.

MISS KATHRYN ADAMS, recently elected president of Constantinople Woman's College to succeed Dr. Mary Mills Patrick, is spending the summer in the United States.

PROFESSOR MIGUEL UNAMUNO, former rector of Salamanca University, Spain, who had been banished to the Canary Islands by the Spanish government because of his connection with political disorders, has been set at liberty by virtue of the recent amnesty decree.

PRESIDENT SAMUEL W. STRATTON of the Massachusetts Institute of Technology delivered the Phi Beta Kappa oration at Harvard University on June 20. His subject was "Research."

MISS HELEN W. LUDLOW, a teacher at Hampton Institute from 1872 until her retirement in 1910, died at Hampton on May 19. Miss Ludlow went to Hampton at the urgent request of General Samuel Chapman Armstrong, and much of what the outside world knows of the Hampton philosophy of education is attributed to her.

DR. ROBERT M. WALMSLEY, principal of the Northampton Polytechnic Institute, Clerkenwell, England, and chairman of convocation of the University of London, died on June 15.

NEW JERSEY state summer schools for teachers, under direction of the State Board of Examiners and approved by the State Board of Education, are being conducted this year in Ocean City, Glassboro and Newton. Sessions in each case began June 30. Residents of New Jersey and non-residents who are under contract to teach in New Jersey may attend the schools without payment of fees.

THE annual three day state-wide conference for teachers of vocational agriculture in Missouri, has been definitely set for Monday, Tuesday and Wednesday, November 24, 25 and 26, 1924.

SUMMER session courses in the evening will be

conducted for the first time this year by the College of Business Administration of Boston University.

THE establishment of a school of citizenship and public affairs as an integral part of the college of liberal arts, with endowment and current support provided by the gift of a benefactor whose identity has not been disclosed, has been announced by Chancellor Charles W. Flint, of Syracuse University. In addition to the original gift, the Carnegie Corporation has made an appropriation toward the expense of organizing the school.

NORTHWESTERN UNIVERSITY has received the $91,000 needed to meet the stipulations of the General Education Board, thus assuring the university of $600,000 from that board. This brings the total in subscriptions for the year up to $2,000,000.

GIFTS amounting to $850,000 were announced at the commencement exercises at Williams College. Some of the funds were the following: Contributions to the Williams War Memorial Endowment Fund, $226,764; contributions to the Williams War Memorial Endowment Fund especially for the new gymnasium, $56,750; from the estate of Francis Lynde Stetson to establish the Stetson Endowment, $65,000; from the estate of Edward W. Morley, to establish the Morley Memorial Fund, $98,346. Donations received during the year affecting capital account were as follows: From the estate of Mrs. Russell Sage, $40,000; from the estate of Mrs. Mary Clark Thompson, $300,000; from Alfred C. Chapin, for use in Chapin Library, $15,650.

THE province of Ontario will contribute $125,000 for the new forestry building at McGill University.

AT the centennial commencement of Kenyon College, Ohio, it was announced that H. G. Dalton had given funds to the college for a new science building. While no amount was specified in the gift, the cost of the building and equipment will be approximately $200,000.

TRINITY COLLEGE, Dublin, has been offered $50,000 by Dr. John Purser, Regius professor of physics at Trinity College, to be used for the benefit of the school of physics and the schools of experimental and natural science.

THE New York City Board of Education recently awarded the contract for the New York Training School for Teachers. The building is to cost $1,735,000 and will house 2,670 students.

SALARY increases for certain Boston teachers have been authorized at a special meeting of the Boston school committee. The schedule of increases had been submitted by the board of estimates and includes the whole teaching staff of the Teachers' College, the headmasters and first assistants in the Latin and day high schools, the headmaster of the Boston clerical school, the master, submasters and masters' assistants in the day elementary and the day intermediate schools, the first assistants in charge of prevocational classes and the prevocational assistants, the school doctors and school nurses, and some others, but omits entirely the rank and file of the teaching force in the various schools. The minimum salary for headmasters in the Latin and day high schools and Teachers' College is $4,284, with a maximum of $5,004; masters in day elementary schools, minimum $3,708, maximum $4,284; submasters in elementary schools, minimum $2,124, maximum $3,270; masters' assistants in day elementary schools, minimum $2,052, maximum $2,532; director of penmanship, $3,636; assistant director, $3,060. According to the Boston *Transcript*, it was stated in the meeting that the schedule was not complete.

THE Baltimore Teachers' Training School has been merged with the Maryland State Normal School at Towson. In announcing the merger the superintendent of schools said:

> The City of Baltimore, through the annual state tax, has been paying for years considerably more than half the cost of the State Normal School and getting in return year by year only a very few and sometimes none at all of the normal graduates to become Baltimore teachers. Now when the merger of the two schools goes into effect, Baltimore will immediately and annually receive a very large return on her investment in the State Normal School in the form of the large number of Baltimore City students trained at the normal school for service in the Baltimore school system.

FORTY representatives from twenty Latin American countries will make an intensive field study of highways and highway transport in the United States early this summer as guests of the Highway Education Board. Dr. John

J. Tigert, chairman of the board and United States commissioner of education, has announced that the countries from which representatives will be chosen include Argentine, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Salvador, Uruguay and Venezuela. The delegation will be known as the Pan-American Highway Commission. The Highway Education Board proposes to conduct the Pan-American visitors, who are to be men of broad experience in highway affairs in their respective countries, on a survey of approximately three weeks' duration through several of the more progressive states of the Union, mostly by automobile, so they may learn first hand what our vast experience in highway building and in highway transport has taught the engineers and economists of this country. It is believed, too, that the visit will result in an interchange of thought and experience that will prove mutually helpful and beneficial to all the governments affected.

THE department of education of the Yale graduate school is planning special experimental studies to determine the most effective ways of utilizing the "Chronicles of America" films in regular class-room instruction. It intends also to act as a clearing house for the experiences of the many teachers throughout the country who will use these motion pictures. As a result of these experiments and this clearing-house work, the department contemplates preparing for publication, and thus making available to teachers everywhere, definite suggestive plans for the most effective use of the history films.

IN preparation for the opening of the new Wisconsin State General Hospital at Madison, three courses for the training and education of nurses, leading to degrees or certificates, have just been drawn up and announced by the faculty of the University of Wisconsin. The courses offered are a three-year professional course leading to the certificate of graduate nurse, and two combined courses of five years, one in the college of letters and science, and the other in the department of home economics in the college of agriculture, each leading to the degree of B.S. and certificate of graduate nurse.

THE results of safety education in reducing accidents are indicated in a recent statement of the National Safety Council, which gives figures for three large cities. Fatal accidents to Washington children were 30 fewer in 1923 than in 1922, a reduction of 47 per cent. Cleveland had 21 fewer such accidents in spite of an increase of 3 per cent. in population and 21 per cent. increase in the number of motor vehicles. Baltimore reports 12 for the first two months of 1924 as against 22 for the same period in 1923. Similar results have been obtained in other cities where safety instruction is given.

DISCUSSION

HEALTHY DISAGREEMENT AS TO EDUCATIONAL SOCIOLOGY

I HAVE just read Mr. Champlin's note in SCHOOL AND SOCIETY for April 19, in which he refers to what he considers the "distressing disagreement concerning the desirable content" of educational sociology that was exhibited at the Chicago meeting of the National Society for the Study of Educational Sociology. There is one change I should like to make in his phrase: Strike out "distressing" and write in its place "healthy." It is a most fortunate thing at this stage that some educational sociologists are working out one ramification of the subject while others are working out other ramifications. Premature standardization would be the worst calamity that could befall educational sociology, or any other subject in the period of its birth. We need to explore a number of aspects of education which are now neglected, and which have pertinency to the spirit and content of sociology, in order that we may hold on to those developments which prove to be most worth while.

Educational sociology is destined to become not a single "course" but a whole division or department of education, just as philosophy or psychology are whole departments made up of many lines of inquiry which supplement each other. I interpret the present "disagreement" among educational sociologists not as a fundamental disagreement at all, but merely as evidence of the existence of a cleavage of interests among the constructive workers in this field that is fortunately getting its complementary ramifications tested out. The difference is one of emphasis and of enthusiasms. The way to define our field is not to set forth a certain "authoritative" definition of the subject and

demand that all who are not working along that line retract, but rather to encourage the development of each phase, from the results of which we may permanently "hold fast to that which is good."

Mr. Champlin's own suggestion of the limits of educational sociology seems to me quite too restricted. Like most such proposals, it expresses the interests of a scholar with a certain particular temperament. Educational sociology will ultimately include what he proposes as only one of several of its major lines of inquiry. I would be very far from ready at this time to give a complete outline of the field of educational sociology, but I see in it at least the following divisions:

(1) An interpretation of the whole of civilization in terms of the acquisition of "controls"—that is, in terms of education. This would be a sort of "philosophical" education sociology which would parallel the philosophy of education that we now have.

(2) A study of the abilities society demands of its oncoming members and the translation of these abilities into terms of school training. This will demand many social surveys and many scientific studies of educational values, and, of course, will demand the development of an adequate technique for such studies.

(3) A study of the actual and possible contributions of the several social agencies which educate, and of the by-products of formal education, and the optimum apportionment of educational obligations among these and the school. This will require many surveys and controlled experiments.

(4) A study of the influence of social contacts upon conduct with a view to the control of conduct through the manipulation of these social forces. This is to be accomplished largely by bringing to bear upon our problem the principles of general sociology, though much research on our own account will also be needed. This is the division of the field which Mr. Champlin indicates as the proper one.

There are probably others, but evidently each of these divisions sets an immensely big and an immensely important task, and the development of each calls for men of particular temperaments and abilities. It is good that our books in this field are specialized; they ought to be specialized; they must be more so in the future. Ultimately every treatise on the subject that expects to get far must be narrowed to one or another aspect of the field. Educational sociology is not one little thing that can be defined in an offhand way, compassed within the covers of a four-hundred page volume, and covered in a three-hour semester course; it is a big field of inquiry with many extensive ramifications the development of which will challenge the cooperative (and supplementive) efforts of men with very diverse temperaments and modes of approach.

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OHIO WESLEYAN UNIVERSITY

QUOTATIONS

CHILD LABOR AND THE STATE LEGISLATURES

CONGRESS has put the question of child labor squarely up to the individual states. The proposed constitutional amendment giving congress the "power to limit, regulate, and prohibit the labor of persons under 18 years of age" was passed by the house on April 26 and by the senate on June 2. Ratification of thirty-six states is needed to make it a part of the constitution.

It is now incumbent upon those backing the amendment to put forth their best efforts to win a majority vote in as short a time as possible. They have a stiff fight ahead of them. Their hardest battle, it is expected, will be waged in the South, where the doctrine of state's rights is still strong. The old prejudice against federal control will be one of the chief stumbling blocks in the way of placing the regulation of child labor in the hands of the Central Government. . . .

A comparison of the roll-call made in both bodies showed that in the upper house twenty-three states (Arizona, Arkansas, California, Colorado, Connecticut, Illinois, Iowa, Kansas, Kentucky, Maine, Massachusetts, Minnesota, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oregon, Rhode Island, South Dakota, Tennessee, Texas and Wisconsin) voted yes; in seven states one senator each was in favor, the others not voting (Indiana, Montana, Oklahoma,

Vermont, Washington, West Virginia and Wyoming). No vote was cast by Michigan, but Senator Ferris let it be known that had he been present he would have cast a favorable vote.

In the lower house all these thirty-one states, with the exception of Texas, registered approval either by a solid or a majority vote. In addition to the thirty-one were Delaware, Idaho, Mississippi, Missouri, New Jersey, New York, Pennsylvania and Utah. Those completely hostile in both houses were Alabama, Florida, Georgia, Louisiana, Maryland, North Carolina and South Carolina. Utah and Idaho were divided against themselves. In their cases the amendment was disapproved in the senate and approved in the house. It is hoped that in the final decision the last-named states will join the ayes, for it is believed that the general sentiment among their people is for better protection of children. The senatorial expression of Delaware, Mississippi, Missouri, New Hampshire, New Jersey, New York, Pennsylvania and Virginia was split.

Thus, taking the congressional vote as a foundation on which to base a prophecy, it may be assumed that thirty states can be counted on to uphold the amendment and that seven will be against it. The balance rests on the decision of the eleven states divided in their own ranks. The support of six of these will be needed to win the victory. . . .

Looking back, one finds that Federal child labor legislation first became important in 1906, when Senator Beveridge and Congressman Herbert Parsons introduced bills "to prevent the employment of children in factories and mines" and Senator Lodge supported a measure designed "to prohibit the employment of children in the manufacture or production of articles intended for interstate commerce." . . .

Some ten years later, in 1916, the first Federal child labor law was passed, and the second in 1919. Both were declared void by the United States Supreme Court. These acts fixed certain simple standards that have been recognized as a measure on which to base reforms. They declared that no child under 14 should be employed in any mill, cannery, workshop, factory or manufacturing establishment; that no child between 14 and 16 should be employed in such establishments for more than eight hours a day, or forty-eight hours a week, or at night, and that no child under 16 should be employed in any mine or quarry. Though the span of their existence was very short, the Federal laws served to improve conditions. In other words, during the lifetime of the acts children enjoyed greater protection and state initiative, instead of being paralyzed, was stimulated. Federal and state governments cooperated for a common end.

Of all the states only eighteen come up to the level set by these standards. They are Massachusetts, North Dakota, Wisconsin, Oregon, Montana, Minnesota, Kansas, Oklahoma, Illinois, Indiana, Ohio, Kentucky, Tennessee, Alabama, West Virginia, New York, New Jersey and Connecticut.

In all but three states a minimum age for work in factories has been established; it is set at fourteen or over. This does not, however, mean that no child may work under fourteen in all the states except three, for there are many exemptions in certain occupations. Six states have higher than a fourteen-year minimum. In more than half the states there has been a tendency to establish a sixteen-year minimum for mines. As for the length of the working day, thirty-five states and the District of Columbia have an eight-hour day applying to children up to sixteen in both factories and stores. The same number prohibit children under sixteen years of age from engaging in night work in factories and stores.

The importance of physical examination is more and more stressed, and twenty-two states make it mandatory before a child can receive his working certificate. Another important standard is that of educational requirements. Only thirteen states exact the completion of at least the eighth grade as a condition. The laws of eighteen states and the District of Columbia have no education requirements at all. They demand only that before going to work the child must be able to read and write, and in some states he must have a knowledge of elementary arithmetic.

One out of every twelve children, between the ages of ten and fifteen, in the United States is gainfully employed. The largest proportion of the 1,060,858 children at work are engaged in agriculture. The figure is placed at 647,309, the remaining 400,000 odd being distributed among mines, factories, stores, mills and so on.

So far the principal opposition to the amendment has come from the National Manufacturers' Association, the Pennsylvania Manufacturers' Association, the Southern Textile Bulletin, the Sentinels of the Republic, the Moderation League of Pennsylvania, the Women's Constitutional League of Maryland and the Anti-Suffrage Association.—*New York Times.*

BOOKS AND LITERATURE

Then and Now in Education. By OTIS W. CALDWELL, director of Lincoln School of Columbia University, and STUART A. COURTIS, dean of Detroit Teachers College. 400 pp. World Book Company.

ONE hears often nowadays the criticism of our public schools, that they are concerned with so many new things, considered by some as fads, that they are neglecting the fundamentals in which the schools of two or three generations back gave such excellent drill. There was recently brought to light a report of a committee that surveyed the Boston high schools in 1845. This report gives copies of examination questions that were given to the Boston schools of that date, and the standings of the pupils. Caldwell and Courtis undertook to give a number of the same questions to pupils of the present day so as to compare the standings of the modern pupils with the Boston pupils. The Boston pupils examined were a picked lot, the best that the masters of the several schools could produce. There were 530 of them examined. More than 7,000 pupils recently examined in the schools of several modern cities were the inferior 40 per cent., for the superior 60 per cent. had already been graduated when the tests were given. The Boston report states the method of procedure in giving the examinations, and the examinations were given in the same way in our modern schools. The median score in 1845 was 37.5 per cent.; in 1919, 45.5 per cent.

In general, the present day children make lower scores on questions involving pure memory and abstract skills, but higher scores on questions involving thought. Thus in geography when answering the question, "Write down the boundaries of Lake Erie," the children of 1845 excelled those of 1919 by 2 per cent. But on the question, "What is the general course of the rivers in North and South Carolina?" the children of 1919 averaged 25 per cent. better than those of 1845. On questions in natural philosophy the children of the modern schools do better than those of the older schools in every case. An attempt was made to compare the relative accuracy in spelling. In the history papers the errors of the pupils of 1845 were about three times as numerous as those of the 1919 pupils, and in geography nearly five times as numerous, although the modern pupils wrote longer answers with more words than did the pupils of the earlier date. Such questions in arithmetic as "What is the square root of 5/9 of 4/5 of 4/7 of 7/9?" involving accuracy of arithmetical computations were better done by the pupils of 1845 than of 1919. On the whole the comparison shows that the modern school excels its earlier equivalent in teaching the fundamental subjects even when the Boston schools are the standard of comparison.

The detailed results of the tests and the methods of procedure are given in this interesting book together with descriptive contrasts of the organization and management of the schools then and now.

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PARTIAL RECONSTRUCTION OF THE HIGH SCHOOL COURSE OF STUDY

MISS SMITH is in difficulty. She is a teacher of average abilities in her third year of high school work who has suddenly discovered that certain parts of the text-book or course of study "just won't teach" to her particular classes. This failure may be due to her methods, she at once admits that; but the same methods are successful enough when applied to other parts of the course—why not to these? Can it be that these troublesome parts of the course as she teaches it are particularly unsuited to the pupils concerned? If so, how can she establish the fact? If the fact be established, how can she select more useful and more teachable material to take the place of the present material? *What is she going to do about it?*

In the writer's opinion this last question deserves an answer by all persons at work on the problems of high school curricula. We have here a definite problem, almost universal in scope, which can be studied experimentally, and which has not yet been met by the experts—since the experts, quite properly, are engaged with their far more significant problem of constructing the program as a whole. But in the meantime what will our teacher do with *her* problem?

If she is entirely normal, she is likely to do nothing; though she may lower her "standards" and spend more time on the material she finds easier to teach. If her department be large enough to possess an intelligent "head," she may from this source receive specific suggestions that are helpful; but she certainly will not receive any clear-cut procedure whereby she herself might select more valuable subject-matter for her pupils. The department head is likely to justify the course of study as it stands, and to talk vaguely of a teachers' committee, to which she herself belongs, which is scheduled to "report" next October. A third possibility is that she may consult the principal or training school instructor and obtain a list of references on curriculum construction. If this list is a good one it will contain Bobbitt's "How to Make a Curriculum," Charters' "Curriculum Construction" and various articles by H. O. Rugg. If the teacher is abnormally conscientious and honest, she will read these references and arrive at the following conclusions: "(1) Bobbitt tells me everything but what I want to know, namely, how I can determine the relative importance to my pupils of the various items in the given course of study and replace the relatively useless items by more useful material; (2) Charters states specifically just how this should be done, but his procedure requires more time than I have to give to the work, and I do not know how to simplify it without danger of invalidating the results; (3) Rugg reports the results of his experiments quite convincingly, but his procedure also is one which only the expert can employ." This reading has widened this teacher's perspective, has helped her to regard her subject from the functional point of view, and has conveyed some assurance that all will be well in the end. Her immediate problem, however, is not appreciably nearer its solution.

For whatever constructive discussion it may provoke, the following procedure is set down in the form of a prescription for teachers in this predicament. It represents the skeleton outline of a procedure which a group of graduate students is applying to various high school courses of study at the present time with a view toward its further improvement. The procedure is quite obviously that of Charters, except in so far as the attempt to adapt it to the high school teacher's personal resources while in service may have introduced certain undesirable features which further experiment will eliminate. Therefore, the more familiar the reader is with Charters' "Curriculum Construction," the more intelligible the following outline is likely to prove.

TENTATIVE PROCEDURE FOR THE TEACHER'S USE IN IMPROVING THE COURSE OF STUDY

(1) Read the chapter in Bobbitt's "How to Make a Curriculum" or in his "Curriculum Making in Los Angeles," which applies most closely to the given course of study.

(2) If you are expected to teach a more or less detailed course of study as contained in a text-book or syllabus, select this as your given material from which to work. Make a topical outline of this course of study as taught during one half year. Each topic should be sufficiently detailed to represent material on which at most two or three class periods were spent. Do not classify the topics but list them in the order taught. The purpose is to secure a working list of each type of subject-matter covered in the half year, with at least one specific example of each type; (*e.g.*, "rules for the use of the semicolon"—followed by the more important of the rules actually taught). In case the course of study is contained in a single text-book, list about 50 representative topics discussed in the text as assigned during the half-year. Then divide the list of topics into units by grouping together those topics which are logically or sequentially related. Copy off the topics in these unit groups. The half-year course should normally contain about ten such units.

(3) List these topic-groups or units in what you consider to be the order of their importance to the pupils who study the course. It is desirable to apply the following steps to the half-year course as a whole; but if your time is limited, select the one or two units of least importance as they stand (or the units you may have found most difficult to teach) and apply the following steps to these units first. You can then proceed with the remaining units as time serves.

(4) Make a parallel list of the *applications* which your pupils might make in real life of each of the topics in the selected units. This will be easier to do if you translate each topic into the specific difficulties in life situations which only a pupil could meet successfully who had mastered the given topics. For example:

Topics	*Applications*
Rules for use of semi-colon	Common sentences involving these rules.
Coherence in sentence structure	Incoherent sentences written or spoken by pupils in the class.
First Continental Congress	Misunderstanding of majority rule, Distrust of representative bodies, etc.
Rules for factoring in algebra	Common expressions to be factored.
Rules for use of partitive in French	Examples of pupils' incorrect uses.
Food values in general science	Examples of improper diets, etc.

List as many of these concrete difficulty applications as you can for each topic in the units on which you are working, but do not list an application merely because it is difficult. It must also be useful in meeting the important situations which the pupils concerned will encounter, and which except for this training they might be unable to meet successfully.

(5) Select at least two other teachers of the same grade and subject, in your own school, if possible, who are likely to be interested in your problem. Show them your parallel lists of topics and applications, and ask them to add any topics or applications which they consider equally important and which do not appear on your list.

(6) Select about five (and more if possible) teachers of the same grade but who have never taught the subject in which you are working out your course of study. These teachers may be chosen from your school or from other schools. Make appointments in advance with each of these teachers for an interview to last from 30 to 45 minutes. At the time of the interview explain your problem briefly as an attempt to check the value of the given units to the pupils you teach. Then briefly describe the contents of the units which you have selected to work upon. Then say, "I want you to tell me as many as you can of the specific ways in which you think your pupils in this grade could apply the subject-matter I have described. It will help me most if you will speak on the following questions:

"(a) In what specific ways have you yourself ever found the subject-matter of these units useful, or in what ways do you find it useful now?

"(b) What applications do you think *all* pupils of the grade we are considering are likely to make of this material?

"(c) What applications do you think will be made by a few pupils of this grade? Think of some one superior pupil. Then of one very inferior pupil.

"(d) Which of the applications you have mentioned above do you think can be learned so easily out of school or in some other subject that it is not worth my while to teach them in my course?" Be sure to insist that the teacher give you specific examples of each application mentioned. Write these down as nearly as possible in the teacher's own words. Then show the teacher your own list of topics and applications and ask to have checked, first, those applications considered important for *all* pupils of the grade; and second, those considered important for *a few* pupils. Continue in this manner with different teachers as long as your available time will permit. It is desirable to keep on interviewing until no new applications are mentioned. Then add the new applications mentioned in all the interviews to your original list, but distinguish by a special mark (A) those applications which *all* pupils are supposed to make. Preserve the notes of each interview, which should bear the name of the person interviewed and the date.

(7) Classify the pupils taking the course into three groups as follows: (1) Those who will probably enter college or professional schools. (2) Those who will probably graduate from high school and later become capable business executives, managers or proprietors as a result of natural ability, hard work and home advantages. (3) Those who probably will not complete high school and who will largely enter skilled and semi-skilled occupations. In making this classification, it is well to ask each pupil to state on paper what he expects to do after leaving school, what his father's occupation is, and what line of work appeals to him most. Then check all doubtful replies by personal interviews.

(8) Interview two representative pupils from each of the three groups, taking them two at a time. Say "I am trying to find out how I can make this course more useful and interesting to the

class. I am asking a few pupils to help me. I want you to tell me as many ways as you can in which you think you can use the facts contained in these units (specify which) either now or after you leave school." Record the replies as before and add any new applications you may get to your list, if you yourself believe they might be useful to these pupils.

(9) Select two or more intelligent adults of your acquaintance to represent each of the three pupil-groups distinguished in 7, provided that each of these groups contains at least 20 per cent. of the pupils. These adults should not be teachers. Show each of these adults your list of applications and ask him to check all the applications which he himself has made in real life, *i.e.*, after leaving school. Then ask him to mark those applications which are best learned in high school, to mark those which are easily "picked up" out of school, and to add any others he thinks equally important. Record the replies as before.

(10) In the case of high school courses which are taken only by pupils preparing for college, it is well to interview high school teachers instead of laymen. Select teachers who are graduates of a four-year, liberal arts college, who have never taught your subject, but who have studied for a year or more in college the subject or subjects for which your high school course of study is intended to prepare. Show each of these teachers your list of topics for the given units and ask him to mention the various applications of this subject-matter which he was required to make in his college courses. Then show your list of applications and ask him to check those of most value, least value, and to supply others of equal value to college students of the given subject, as in 9 above.

(11) Lay out the lists of applications which you have obtained from each of the above interviews. Divide these applications into two groups, Group A and Group B. List in Group A the applications which are said to be useful for all pupils of the grade by all persons interviewed in steps 6, 9 and 10 above. List in Group B the applications which have been suggested or checked as being of most value for each of the three pupil groups by persons interviewed in steps 8 and 9. Reject the remaining applications, unless some of them which do not qualify for either Group A or Group B are nevertheless useful in the teaching of the applications which do qualify for these groups.

(12) Eliminate the subject-matter topics which refer to material that is only useful in teaching the applications you have rejected. Supply other subject-matter which is needed to teach the applications you have listed in Groups A and B. Such additional subject-matter is usually best suggested by asking yourself the question, "What does the pupil need to know before he can make this particular application successfully?" In case the particular application is too broad to be taught directly (*e.g.*, writing sentences in which the meaning is perfectly clear to the reader) it must be broken up into simpler elements which the pupil can learn one at a time. In other words, each application must be analyzed until the pupil's familiar experience and abilities are reached or approximated.

(13) Include the applications and the requisite subject-matter of Group A in your course of study first. Then follow with the applications and subject-matter of Group B, as time is available, after enough time has been allowed for the effective teaching of the Group A applications to pupils of average ability in your school. In the case of courses that are strictly college preparatory, the Group A applications will naturally be those which are found useful for all pupils entering college.

(14) Outline the unit as you propose to teach it. Begin with the subject-matter which contributes to the easier applications of Group A; then work progressively through the more difficult applications of Group B. Then compare this outline with the contents of other units in your course and note whatever duplication there may be. Eliminate the duplicated material from the units that come later in sequence. Supply whatever "connective tissue" is necessary to give real unity to each unit. Then check the completed outline with teachers of other courses in the subject to avoid duplicating material in these other courses.

(15) Determine by experiment the relation between importance and difficulty for each item in the units you have reorganized until a satisfactory compromise is reached.

The attempt to outline this procedure specifically in small space makes it appear more formidable than it actually is. The procedure itself is not too complicated for any interested teacher to apply, since the proportion of the course thus reorganized may be as small as the teacher chooses. The worth of the procedure can not be established without further experiment; but even in its present form it should prove useful to that great majority of high schools where a more adequate and more scientific procedure is far to seek, and where curricular improvements, if made at all, must be made by the individual teacher.

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EDUCATIONAL RESEARCH AND STATISTICS

SCHOOL STANDING AND PHYSICAL TRAITS

THE relation between physical and mental traits has been the subject of a number of investigations. The results are conflicting, though the preponderance of evidence indicates a tendency for superior mental ability and superior physical development to be associated, while inferior mentality is found with inferior physique. Of the thirteen more important studies in the field dealing with normal children nine, namely, Gratsianoff,[1] Sack,[2] Porter,[3] Christopher,[4] Smedley,[5] Bebusk,[6] Baldwin,[7] Woodrow and Lowell[8] and Murdock and Sullivan[9] reached the conclusion that a positive relationship exists between physical and mental development. Two, Gilbert[10] and MacDonald,[11] found no correlation; while two, West[12] and Bagley[13] found it to be negative.

In the nine investigations where a positive relation was found, the age-grade or intelligence test score was taken as a measure of mental development. In the four cases where a zero or negative relationship was found, the judgments of the teachers or the class marks were taken as an index of intelligence. It is well known that there is a tendency for the teacher to estimate the intelligence of a pupil in accordance with the standard set for the class. Thus the ability of the over-age child is compared with his younger classmates, and his relative intelligence is overestimated, and conversely the under-age pupil is underestimated. It may be that this factor is sufficient to conceal or even apparently reverse the true relationship.

All authorities have found that the feeble-minded, both adults and children, possess a physical development below the normal.

The results of the investigations by Galton,[14] Wissler,[15] Naccarati[16] and Landis, Burt and Nichols[17] dealing with normal adults agree in finding no relation between intelligence and simple physical measurements, though Naccarati finds relations between mental ability and a combination of anthropometric measurements.

With the hope of throwing additional light

[1] "Data for the study of physical development of children," N. A. Gratsianoff, 1889.

[2] "Physical development of children in the middle schools of Moscow," N. Sack, 1892. The original publications by Gratsianoff and Sack were not accessible to the writer.

[3] "The physical basis of precocity and dullness," William T. Porter, Trans. of the St. Louis Acad. of Sci., March 21, 1923. "The growth of St. Louis children," Trans. St. Louis Acad. of Sci., April, 1894.

[4] "Report on child study," W. S. Christopher, 45th An. Report of the Chicago Board of Education, 1899.

[5] "Report of the committee on child-study and pedagogic investigation," Fred. W. Smedley, 46th An. Report of the Chicago Board of Education, 1900.

[6] "Height, weight, vital capacity and retardation," B. W. Bebusk, *Ped. Sem.*, March, 1913.

[7] "The normal child; its physical growth and mental development," Bird T. Baldwin, *Pop. Sci. Mo.*, 1914; "Physical growth and school progress," U. S. Bur. of Education, Bul. No. 10, 1914; "The relation between physical and mental growth," *Jour. of Ed. Psychol.*, 1922.

[8] "Some data on anatomic age and its relation to intelligence," Herbert Woodrow and Frances E. Lowell, *Ped. Sem.*, March, 1922.

[9] "A contribution to the study of mental and physical measurements in normal children," Katharine Murdock and Louis R. Sullivan, *Am. Phys. Ed. Rev.*, May and June, 1923.

[10] "Researches on the mental and physical development of school children," J. A. Gilbert, Studies from the *Yale Psychol. Lab.*, Vol. II, 1895. "Researches upon school children and college students," Univ. of Iowa Studies in Psychol., Vol. I, 1897.

[11] "Experimental studies of children," Arthur MacDonald, Report of the Commissioner of Education, 1897–98.

[12] "Observations on the relation of physical development to intellectual ability made on the school children of Toronto, Canada," C. M. West, *Science*, August 7, 1896.

[13] "On the correlation of mental and motor ability in school children," William C. Bagley, *Am. Jour. Psychol.*, January, 1901.

[14] "Useful anthropometry," Francis Galton, *Am. Ass. Adv. Phys. Ed.*, 1891.

[15] "Mental and physical tests," Clark Wissler, *Psychol. Rev.*, Monograph Supplement, Vol. III, 1901.

[16] "The morphologic aspects of intelligence," Sante Naccarati, *Arch. of Psychol.*, Columbia University, No. 45, August, 1921.

[17] "The relation between physical efficiency and intelligence," M. H. Landis, H. E. Burt and J. H. Nichols, *Am. Phys. Ed. Rev.*, May, 1923.

on the subject, data concerning the class standing and physical traits of the students of the Sargent School for Physical Education were collected. The school offered the following advantages for such a study: The interest and cooperation of Dr. Dudley A. Sargent which made the work possible; the school work consists of two distinct branches, about half the work involving mental activity and the other half mainly physical activity; all the physical measurements were made by Miss Jennie B. Wilson, an expert in anthropometric measurements, and by trained assistants under her immediate supervision; the main part of the course had been but little altered during the period for which statistics were collected; many of the courses have been continuously conducted by the same instructors. The courses are given by specialists in the various fields. Those giving the courses in theoretical work are also connected with other institutions such as Harvard and Tufts.

The data used had the disadvantage of covering a period of twelve years, which was necessary in order to obtain 1,000 cases, and during this time a change in the distribution of the grades took place. The median of the average grades shows no constant change; in the lecture courses it varies from 76.0 to 78.4, and in the practical courses from 79.1 to 83.2; but there has been a tendency for the grades to become more closely concentrated around the point of central tendency in the later years.

The Sargent School is open to women who have had the equivalent of a high school education. The median age of those included in this study was, at the time of entrance, 19.2 years with a quartile deviation of 0.9 years. The course covers three years.

In order to obtain a measure of mental ability the average grade received in twenty lecture courses was found for each student. A measure of physical ability was obtained in a similar manner from the grades received in fifteen practical courses, including such work as light and heavy gymnastics, dancing, Indian clubs, athletics, swimming, games, etc. Any student who had not taken at least two thirds of these theoretical and practical courses and who had not spent over two years in the school was excluded.

The term physical ability is used to indicate the ability or skill of the student in gymnastic work; the term physical development to indicate development as determined by anthropometric measurements. Skill and muscular control are more important factors than strength in determining the grades received in all the practical courses. This is obvious in such subjects as dancing and Indian clubs. Even in heavy gymnastics the tasks set for the examinations are well within the strength of practically every student; it is her power of muscular control and coordination that determines her marks.

Each student is given three thorough physical examinations during the three-year course. The following measurements were selected from the records of the entering freshmen to compare with physical and mental ability: age, height, weight, girth at the ninth rib when breathing naturally and when the lungs were inflated, vital capacity, strength of the chest, back and legs, right and left grip, and the girth of the right thigh, the right calf and the right and left forearm. From these measurements the ninth rib expansion, the area of the body surface and the vital capacity per unit of body surface were calculated.

The ninth rib expansion was found by subtracting the girth at the ninth rib when breathing naturally from the girth when the lungs were forcibly inflated. The area of the body surface was obtained from the chart of Delafield Dubois and Eugene F. Dubois. The other measurements were taken with the apparatus and by the methods of Dr. Dudley A. Sargent as described in his book on "Anthropometric Apparatus."

In order to determine the relationship between mental ability, physical ability and physical traits the cases were divided in the first instance into four groups of 250 each, the first group including the twenty-five per cent. who received the highest average in the physical or practical work, the second group the next highest, etc. These groups will be noted as practice groups I, II, III and IV, respectively. In each of these four groups the median grades in practical work were calculated and are given in the second column of Table I. In the fifth column are the median grades received by the same students in theoretical work. The quartile deviations are given for the practice grades in column three and for the theory grades in

TABLE I. GRADES IN PRACTICE AND IN THEORY

Practice groups	Grade—practice			Grade—theory		
	Median	Q.D.	Ratio	Median	Q.D.	Ratio
I	86.6	1.5	106.6	79.8	3.2	104.3
II	82.1	0.7	101.7	77.6	3.2	101.4
III	79.2	0.7	98.1	75.1	2.9	98.2
IV	75.6	1.4	93.7	73.0	3.7	95.4
All groups	80.7	3.1	100.0	76.5	3.8	100.0

column six. This measure gives half the distance between the twenty-fifth and seventy-fifth percentile points, that is, the distance on either side of the median within which one half of the measures fall. It is the probable error of the separate measurements and assuming a normal distribution, the probable error of the median grade is this figure divided by the square root of the number of cases less one.

The students in group I have a median grade in practice of 86.6 while they have a median grade of 79.8 in theoretical work. Those in group II have a median of 82.1 in practice and 77.6 in theory. Those in groups III and IV have medians in practice of 79.2 and 75.6 and in theory of 75.1 and 73.0, respectively. It is seen that on the average the theoretical work of those who stand highest in practice work is superior to that of the other groups and that the quality of the theoretical work decreases as the practice work becomes inferior. Combining groups I and II and groups III and IV, the median practice grade in the upper half was 83.7 and in the lower 77.5, while the theoretical grade in the upper and lower groups was 78.7 and 74.4, respectively.

Since the median grade is lower in the theoretical work than in the practical work the relations are shown better when the figures are reduced to a common standard, the median of all groups being taken as 100. These figures are shown in columns four and seven of Table I and in Figure 1.

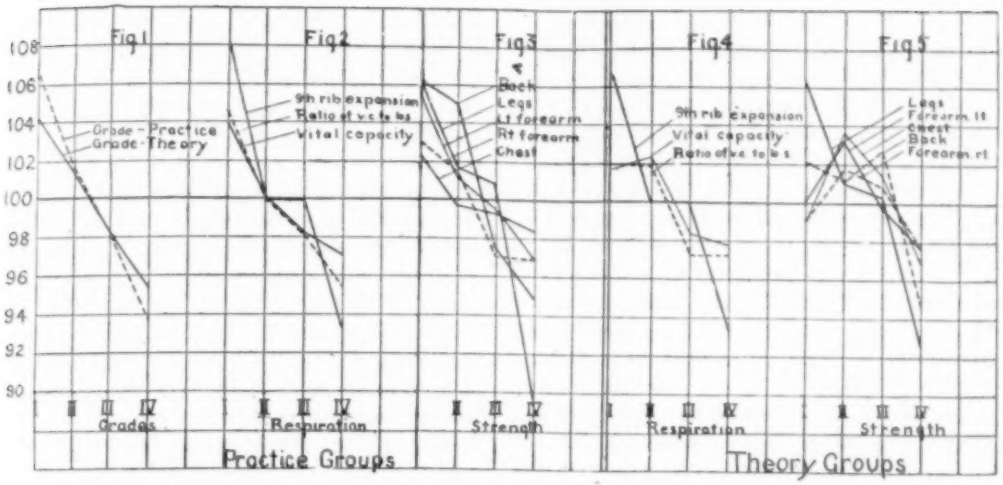
The correlation coefficient worked out by the Pearson product moment method was found to be $+0.42 \pm 0.02$.

The median of each of the physical measurements for the four practice groups is given in the upper section of Table II.[18]

[18] In all there were one thousand cases, but as certain of the measurements could not be obtained for certain years, the number in the groups varied from 187 to 250. It was assumed that the median grades of the groups would not be appreciably

TABLE II. PHYSICAL MEASUREMENTS AND SCHOOL STANDING IN PHYSICAL WORK

Groups / Grades	Respiration			Strength					Girths									
	Vit. cap	Ratio of vit. cap to Body S.	9th Rib Expansion	Chest	Back	Legs	Rt. Forearm	Lt. Forearm	9th Rib —nat.	9th Rib —infla.	Thigh	Calf	Rt. Forearm	Lt. Forearm	Height	Weight	Area of Body S.	Age
I 86.6	179	1.13	6.5	31.2	84	93.9	29.5	26.9	72.8	79.4	53.7	34.0	24.2	23.7	160.9	54.7	156	19.1
II 82.1	173	1.08	6.0	30.4	83	89.9	29.0	25.8	73.3	79.3	55.1	34.4	24.5	23.9	162.0	55.6	159	19.4
III 79.2	169	1.06	6.0	30.3	77	89.3	27.8	25.4	72.8	78.7	54.9	34.5	24.3	23.8	161.3	55.9	159	19.1
IV 75.6	167	1.03	5.6	30.0	75	79.3	27.7	24.7	73.2	78.6	54.5	34.3	24.2	23.5	161.5	55.3	159	19.3
Totals (about 1,000 cases)																		
Median	172	1.08	6.0	30.5	79	88.4	28.6	25.5	73.1	79.1	54.6	34.3	24.3	23.7	161.4	55.4	158	19.2
Q. D.	16	.09	1.3	5.3	12	16.5	3.5	3.7	3.2	3.3	3.0	1.6	1.0	1.0	3.9	4.9	8	0.9
in Theoretical Work																		
I 83.1	175	1.10	6.4	30.2	81	93.9	28.3	25.5	72.8	79.1	53.9	34.0	24.3	23.6	161.8	55.0	158	19.4
II 78.2	176	1.10	6.0	31.6	80	89.3	29.1	26.3	73.7	79.2	55.0	34.6	24.6	23.9	161.8	55.6	159	19.0
III 74.9	169	1.05	6.0	30.9	81	88.6	28.8	25.4	72.7	78.5	54.9	34.5	24.5	23.9	160.9	55.4	158	19.4
IV 70.4	168	1.05	5.6	29.5	75	81.8	27.9	24.9	73.4	78.8	54.7	34.1	24.2	23.6	161.3	54.9	158	19.1



Ratio of the Median Measurements of the Groups to the Median of all the Cases

In order to show the relation between mental ability and physical development, the individuals were rearranged in accordance with the average grade in theoretical work and theory groups I, II, III and IV obtained in the same manner as the practice groups. The medians of each of the various measurements for each of these groups were calculated and are given in the third sections of Table II. The median for the totals, that is, the groups combined, and the quartile deviations (Q. D.) of the totals are given in the middle section of the table. The quartile deviations of the various measurements were also calculated for the four practice and the four theory groups, but, since there were no significant variations between them and the medians of all the totals, they are omitted in order to save space.

A comparison of the medians in the different columns of the upper section of Table II will indicate which measurements are correlated with school standing in physical work, those in the last section, with school standing in theoretical work. Since the measurements are not all given in the same units, the comparison is facilitated when the medians are reduced to a common standard, as explained above in connection with the grades. The data for the measurements of strength, respiration and grades are shown in the accompanying charts. The curves for the other measurements, where there was no relationship indicated in Table II, are omitted, as are the figures from which the curves were constructed. These curves make no allowance for the varying ranges of the measures and are not strictly comparable, but they give a general idea of the relations and their variability.

The relation of strength to school standing in physical work is not as high as that found between standing in the two branches of school work, but Figure 3 shows a positive relation between all the strength tests and the average grade in practice.

The relation between practice and the three measurements of respiration was found to be slightly closer than that between practice grades and strength. Figure 2 appears to indicate a marked relation between these measurements and school standing.

The physical measurements as distinguished from the psychophysical measurements show no definite variation with school standing. The median height of any of the practice groups does not vary more than four tenths of one per cent. from the median height of the total. Age, weight, area of the body surface, and girth measurements at the ninth rib during natural breathing and when the lungs were inflated, the thigh, the calf and the forearm, all vary less than one and six tenths of one per cent. from the norms found for the whole 1,000.

altered by omitting those cases for which a certain measurement was lacking. This assumption was checked and found correct by trying it out for the strength and girth of the forearm, where the largest number of measurements were lacking.

Turning to the theory groups, the same relationships are found to hold, but to a less degree. As was found in studying the practice groups, the highest relationships were found between measurements of respiration. See Figure 4. The strength measurements also show a general though somewhat irregular relation to school standing in theoretical work. See Figure 5. As with school standing in practical work, there is practically no variation in the median height of the four groups, the greatest deviation being three tenths of one per cent. The medians of the measurements of weight, body surface, age and girths vary not more than one and three tenths per cent.

The method of dividing the data into four groups and taking medians was used, first, because a relationship can be determined quickly and, second, because the significance of the relationship in some respects is clearer and more accurate than a coefficient of correlation. A coefficient of correlation is an adequate measure of relationship only when the distributions approach a normal probability curve; most of them are skewed to varying degrees. Coefficients were obtained in those instances where the shorter method indicated a relationship. These were between school-standing and strength measurements; between school-standing and respiration and between school-standing in the two branches of work. The coefficients which were worked out by Pearson's product moment method were as follows:

Practice grades with theory grades 0.422		
	Theory	Practice
Vital capacity	0.123	0.189
Vital capacity divided by the area of the body surface	0.11.4	0.260
Ninth rib expansion	0.080	0.202
Strength of chest	0.052	0.104
Strength of back	0.099	0.206
Strength of legs	0.176	0.155
Strength of right forearm	0.070	0.145

The coefficients are low, but they are not due to chance, the probable error being approximately 0.02 in each case, the lowest being 0.020 and the highest 0.025. Between school standing in physical work and measurements of strength and respiration the coefficients are from 5 to 13 times the probable error; between the average grade in theory and strength and between theory grades and measurements of respiration the coefficients are from about three to six times the probable error. The coefficients between theory grades and these measurements are about half those between the measurements and practice grades.

These results agree with other investigations dealing with adult subjects in so far as no correlation was found between school-standing and physical measurements of height, weight and girth. But little work has been done on the relation of the psycho-physical measurements to school-standing or intelligence. Neither Galton nor Wissler found any correlation between strength of the grip and success in college work. Neither Galton nor Naccarati found any relation between vital capacity and success in college or intelligence test scores, respectively. Wissler found a correlation of 0.53 between college-standing and gymnasium work of Columbia students, which is eleven points higher than that found between the physical and theoretical work of the Sargent School students. Landis, Burt and Nichols found no relation between intelligence test scores and efficiency in athletic events.

If standing in school in theoretical subjects may be taken as a measure of mental ability and standing in practical physical work as a measure of physical ability, it may be concluded that among women students selected for their interest in physical education:

1. There is a positive relation between mental and physical ability.

2. There is a smaller positive relation between physical ability and the development of the lungs; and between gymnastic or physical ability and strength.

3. A still smaller positive relationship exists between mental ability and the development of the lungs; also between strength measurements and mental ability.

4. There is no relation between either physical or mental ability and size, as shown by measurements of height, weight and girths.

5. There is no relation between success in either physical or mental work and the age of entering a normal school of physical education.

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